Appl. No. 10/521,970 Reply to Office Action of November 11, 2007 Attorney Docket No. P16256-US1 EUS/GJ/P/08-2556

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method for recognizing a keyword from a spoken utterance, with at least one keyword model and a plurality of garbage models, wherein comprising the step of assessing a part of the spoken utterance is assessed as the keyword to be recognized, if that part matches best either to the keyword model or to a garbage sequence model[[, and]] wherein the garbage sequence model is a series of consecutive garbage models from that plurality of garbage models.
- (Currently Amended) The method according to claim 1, A method for recognizing a keyword from a spoken utterance, with at least one keyword model and a plurality of garbage models, comprising the steps of:

assessing a part of the spoken utterance as the keyword to be recognized, if that part matches best either to the keyword model or to a garbage sequence model, wherein the garbage sequence model is a series of consecutive garbage models from that plurality of garbage models and wherein the garbage sequence model is determined

by comparing a keyword utterance, which represents the keyword to be recognized, with the plurality of garbage models and

detecting the series of consecutive garbage models from that plurality of garbage models, which match best to the keyword to be recognized.

 (Currently Amended) The method according to claim 1 or 2, A method for recognizing a keyword from a spoken utterance, with at least one keyword model and a plurality of garbage models, comprising the steps of: assessing a part of the spoken utterance as the keyword to be recognized, if that part matches best either to the keyword model or to a garbage sequence model, wherein the garbage sequence model is a series of consecutive garbage models from that plurality of garbage models and wherein the determined garbage sequence model is privileged against any path through the plurality of garbage models.

4. (Currently Amended) The method according to claim 1 any of the claims 1-3, further

determining a number (N) of further garbage sequence models, which also represent that keyword to be recognized, and

assessing the part of the spoken utterance as the keyword to be recognized, if that part of the spoken utterance matches best to any of that number (N) of garbage sequence models.

(Original) The method according to claim 4, wherein the total number (N+1) of garbage sequence models are determined:

by calculating for each garbage sequence model a probability value and selecting those garbage sequence models as the total number (N+1) of garbage sequence models, for which the probability value is above a predefined value.

6. (Currently Amended) The method according to claim 1 any-of the claims 1-5, further

detecting a path through the plurality of garbage models, which matches best to the spoken utterance,

calculating a likelihood for that path, if the garbage sequence model is contained in that path and

wherein for assessing a part of the spoken utterance as the keyword to be recognized, that path through the plurality of garbage models is assumed as the garbage sequence model, when the likelihood is above a threshold.

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7. (Original) The method according to claim 6, wherein

the likelihood is calculated based on the determined garbage sequence model and the detected path through the plurality of garbage models and a garbage model confusion matrix and

wherein the garbage model confusion matrix contains the probabilities p(i/j) that a garbage model i will be recognized supposed a garbage model j is given.

- 8. (Original) The method according to claim 7, wherein the likelihood is calculated with dynamic programming techniques.
- (Currently Amended) The method according to claim 1 any of the claims
 +8, wherein the at least one garbage sequence model is determined, when a keyword model is created for a new keyword to be recognized.
- (Currently Amended) The method according to claim 1 any of the claims
 wherein the keyword utterance is speech, which is collected from one speaker.
- (Currently Amended) The method according to claim 1 any of the claims
 wherein the keyword utterance is speech, which is collected from a sample of speakers.
- (Currently Amended) The method according to claim 1 any of the claims
 49, wherein the keyword utterance is a reference model.
- 13. (Currently Amended) A computer program product with program code means for performing the steps according to one of the claims 1 to 12 recognizing a keyword from a spoken utterance, with at least one keyword model and a plurality of garbage models, computer program product adapted to assess a part of the spoken utterance as the keyword to be recognized, if that part matches best either to the

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keyword model or to a garbage sequence model, wherein the garbage sequence model is a series of consecutive garbage models from that plurality of garbage models when the product is loaded from a computer readable medium and executed in a computing unit

- (Original) The computer program product with program code means according to claim 13 stored on a computer-readable recording medium.
- 15. (Currently Amended) An automatic speech recognition device 100, implemented the method according to claim 1 any of the claims 1-12, including
- a pre-processing part [[(110)]], where a digital signal from an utterance, spoken into a microphone [[(210)]] and transformed in an A/D converter [[220]] is transformable in a parametric description;
- a memory part [[(130)]], where keyword models, SIL models, garbage models and garbage sequence models are storable;
- a pattern matcher [[(120)]], where the parametric description of the spoken utterance is comparable with the stored keyword models, SIL models, garbage models and garbage sequence models;
- a controller part [[(140)]], where in combination with the pattern matcher [[(120)]] and the memory part [[(130)]], the method for automatic speech recognition is executable.
- (Original) A mobile equipment, with an automatic speech recognition device according to claim 15, wherein the mobile equipment is a mobile phone.